Navy ERP: Where We've Been – Where We're Going

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PDI

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What is ERP?

Integrated Business Management System

Financial and Acquisition (1.0)

- Financial Management: General Fund & Navy WCF
- Procurement
- Work Force Management
- Program/Project Management

Wholesale and Retail Supply (1.1)

- Planning
- Allowancing
- Procurement
- Repair of Repairables
- Order Fulfillment

Modernizes & Standardizes Business Operations

- Common processes and data support real time information exchange across the Navy
- Navy ERP will enable DoN to have auditable financial statements for the first time

Provides Management Visibility Across the Enterprise

- Single entry, single source data, single view of organizational status
- Asset visibility allows better management of inventories
- Currently, ~27% of the Navy's TOA is managed within Navy ERP, with a target of 50% for the POR at FOC and 100% for the Financial Extension

Increases Effectiveness & Efficiency

- The Navy is currently turning off legacy systems and eliminating their maintenance expense
- Navy ERP implements streamlined processes, standardized across DON to ensure mission support

PROPELLING TRANSFORMATION

NAVY ERP PROGRAM

Utilizing commercial off-the-shelf product and business process reengineering, the ACAT1 Program Office is comprised of subject-matter experts, industry partners, and its customer commands

Navy ERP Strategy

- **A two phase deployment (by functionality) resulting in one integrated solution**
  - **Financial and Acquisition (1.0)**
    - Designed to give an Echelon II or III command a full suite of tools to perform their financial & acquisition functions
    - Functionality grouped into four categories:
      - Financial Management: General Fund & Navy Working Capital Fund
      - Procurement
      - Work Force Management
      - Program/Project Management
  - **Wholesale and Retail Supply (1.1)**
    - Designed to support the Navy's Single Supply Solution. Program of record for repairables and consumables
    - NAVICP will be the single Inventory Manager for NWCF, setting allowances and aligning budgets with dollars
    - Functionality falls into five end-to-end supply chain management processes:
      - Planning
      - Allowancing
      - Procurement
      - Repair of Repairables
      - Order Fulfillment
  - **Potential Future Capabilities:** Financial Extension, Maintenance, Reporting, Contracting, Material Equipment Valuation, Foreign Military Sales (FMS), Manufacturing Planning & Control, Material Tracking

Program of Record – Deployments

COMMAND	GO-LIVE DATE	MAJOR SITES	# OF USERS	TOTAL USERS
NAVAIR (1.0 Functionality)	1-Oct-07	• Patuxent River, MD • Orlando, FL • Lakehurst, NJ • China Lake & Pt. Mugu, CA • Atsugi, Japan	15,000	15,000
DFAS Support	1-Oct-07	• Cleveland & Columbus, OH	350	15,350
NAVSUP (1.0 Functionality)	1-Oct-08	• Mechanicsburg & Philadelphia, PA • San Diego, CA • Norfolk, VA • Yoko, Japan	9,500	24,850
SPAWAR	1-Oct-09	• San Diego, CA • New Orleans, LA • Norfolk, VA • Charleston, SC	9,265	34,115
NAVSUP (by NIINs)[1] ▪ Material Group 1 (20%) ▪ Material Group 2 (40%) ▪ Material Group 3 (40%)	 17-Mar-10 Aug - 10 Feb - 11	• Mechanicsburg & Philadelphia, PA • San Diego, CA • Norfolk, VA • Yoko, Japan		34,115
NAVSEA[2] ▪ General Fund ▪ Working Capital Fund	 Oct-10 Oct-11	• Washington, DC	 7,667 22,382	 41,782 64,164
SSP & ONR[2]	Oct-12		3,390	66,554

1. Users already had access and are part of the NAVSUP 1.0 figure
2. Planning figures

Functionality

Finance (General Fund)
Budgeting
Billing
Business Warehouse
Cost Planning
DFAS Interfaces
Direct Cite
Travel (DTS)
Echelon I Fin Accounting
Fixed Assets
External Procurement
General Fund Accounting
MISIL (Foreign Military Sales)
Period End Close
Portals (Basic Log In)
Credit Card
Project Mgmt
Echelon II & III Financial Reporting

Finance (NWCF)
Billing
Budgeting
Cost Revenue & Planning
Credit Card
DFAS Interfaces
Travel (DTS)
Echelon III Fin Reporting
External Procurement
Fixed Assets
Managerial Accounting
NWCF Accounting
Period End Close
Project Mgmt

Retail Supply
Inventory Mgmt
Order Fulfillment
Supply & Demand Processing
Supply Forecasting
Warehouse Mgmt
Regional HAZMAT

Plant Supply (Core)
Environmental Health & Safety (EH&S)
Warehouse Mgmt
Physical Inventory
Serial No. Tracking (End User Only)
DLMS/MILSTRIP
Inventory Mgmt
Automated Identification Technology

Wholesale
Allowance
Supply & Demand Planning
Supply Outfitting
Carcass Tracking
Order Fulfillment
Supplier Relationship Mgt
Supply Forecasting
Inventory Mgmt
Packaging Handling Storage & Transportation
Provisioning
Consignment
Repairables Management
Environmental Health & Safety (EH&S)

WFM
Organization Mgmt
Personnel Admin
Personnel Development
Time Management
Training & Events Mgmt
Business Warehouse

Acquisition
Activity Based Costing
Awards
Budget Exhibits (52)
Status of Funds Reporting
Engineering Change Management
Production Planning
Standard Procurement System
EVM

Deployment Order:

- Funds Allocation Prototype
- 1.0 - Ech. II/III Financial & Acquisition
- 1.1 - Wholesale & Retail Supply

Interfaces

Navy:	30
OSD/ BTA:	8
DLA:	3
DFAS:	9
Treasury:	1

Deployment Order:

- 1.0 - Financial & Acquisition
- 1.1 - Wholesale & Retail Supply

NAVY INTERFACES

1.0 Financial Acquisition

- DONIBIS
- DONCADS
- MISIL
- MPCS
- NALCOMIS
- NES
- OPINS
- PBIS
- RAPS
- TFMMS
- UICP

1.1 Supply Chain Management

- CDF-NG
- CDMD-OA
- CFMS
- CPEN
- eRMS
- FACTS
- G02APU
- ICAPS
- ITIMP
- NALCOMIS-OIMA
- NDMS
- OTS
- PARTS
- Readiness Suite
- REMAD
- SLDP
- TIER 2
- TRIDENT LDS

DoD INTERFACES

1.0 Financial Acquisition

- ADS
- APVM-EUD
- CCR
- DAAS
- DCAS
- DCD
- DCPS
- DDRS
- DTS
- FRB
- FRS
- IPAC
- myInvoice
- PPVM-EUD
- SPS
- STARS-HCM
- WAWF
- WEBCMET

1.1 Supply Chain Management

- FLIS
- RMDC
- SABRS
- STARS-FL

Daily Life in Navy ERP

The ten most utilized Navy ERP transaction codes (grouped by business process) with weekly access/usage ranking

- A transaction code is a command that tells the system location of a task. Each function in SAP has a transaction code associated with it, which provides a shortcut to a specific function in SAP.
- One Touch Support (OTS) is a web-based system that provides customer on-line requisitioning, technical screening, asset visibility, shipment status, requisition status information, and support request management
- At the time of gathering (April 2010) Navy ERP had ~34,000 users

Weekly Ranking	Transaction Code	Transaction Description	Requests Per Wk (in '000s)	Response Time (seconds)
4	ME51N	Create Purchase Requisition	242	1.06
7	ME52N	Change Purchase Requisition	101	1.24
1	ME53N	Display Purchase Requisition	607	0.6
13	ME21N	Create Purchase Order	11	0.41
10	ME22N	Change Purchase Order	44	0.4
3	ME23N	Display Purchase Order	323	0.37
8	MIGO	Goods Movement	60	0.49
12	VA01	Create Sales Order	19	0.89
6	VA02	Change Sales Order	113	0.68
14	VA05	List of Sales Orders	2	4.01
9	One Touch	Customer Portal	60	4.01
2	CAT2	Enter Timesheet	374	0.68
11	PA20	Display HR Master Data	20	0.64
5	CJ20N	Project Builder	217	0.78

Program Updates

SPAWAR (Oct '09)

- Operating at Full Operational Tempo (FOT) since 16 Dec 09
- Reported FY10 1st and 2nd quarter financial statements out of Navy ERP
- Converted data subjected to a financial validation by a combined DFAS/FMO team
  - See next slide for details
- Steady improvement on the Post FOT Business Performance and Health metrics presented to the Navy ERP Senior Integration (NESIB) Board monthly
  - 16 of 20 metrics are above threshold
  - Factors affecting the remaining 4 metrics:
    - Manual Processing
    - On-going data conversion and catch-up issues
    - Business Process Changes
    - User Education

FMO/DFAS Validation/Reconciliation Effort

- **The FMO/DFAS Conversion Validation Team analyzed data from 4 Legacy systems used by 6 SPAWAR activities:**
  - Standard Accounting and Reporting System Headquarters Claimant Module (STARS HCM) (used by SPAWAR HQ)
  - Standard Accounting and Reporting System Field Level (STARS FL) (used by GF field sites)
  - Defense Industrial Financial Management System (DIFMS) (used by SSC LANT)
  - Cabrillo (used by SSC PAC)

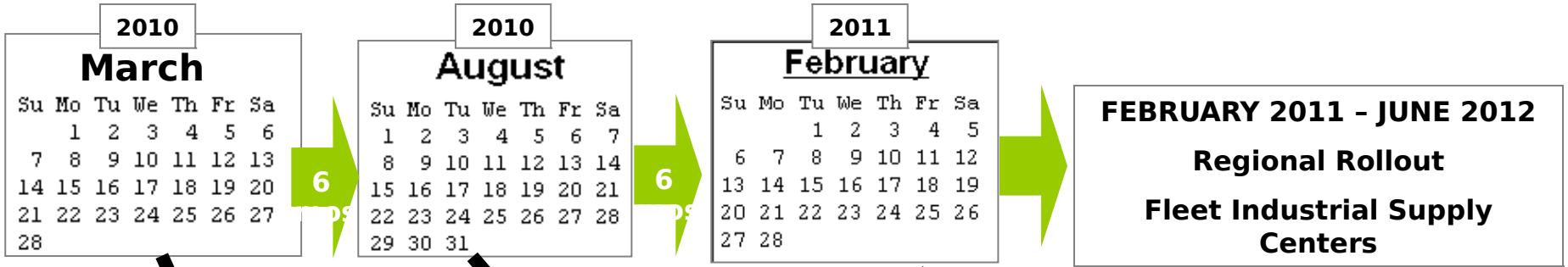
- **On 31 Dec 09, the FMO/DFAS validation team completed the review of 20,195 General Ledger (G/L) accounts, across 568 Trial balances, for 14 appropriations, for 6 SPAWAR Business Areas.**
  - Overall, 99% of the G/L accounts tied out to legacy systems or the variances were reconciled/explained.
    - Initially, 75% (15,244) of the G/L balances were consistent between the legacy systems and Navy ERP.
    - Of the remaining 4,951 G/L accounts containing variances, 24% (4,819) of the G/L accounts were reconciled and explained.
    - 1% (132) of the G/L accounts either needed corrective actions post Full Operational Tempo (FOT) or were deemed immaterial based on the materiality threshold**.**
      - **Since this review all but 4 corrective actions have been completed.**

Program Updates (cont'd)

Single Supply Solution Implementation (Mar '10)

- Material Group 1 in stabilization period. Anticipating achievement of FOT May 2010.
- Phased Deployment (see next slide for details)
- Over 54 million data objects loaded and converted with 100% accuracy
  - Data converted for each material group is being validated financially by a combined FMO/DFAS team.
- Replaces many legacy AIS (UICP, U2, R-Supply, Ashore)
- Does **NOT** replace afloat logistic systems. *NTCSS Suite (R-Supply Force/Unit, NALCOMIS, OMMS-NG, MFOM) to remain in place.*
- Financial Compliance Assessment performed by FMO/DFAS team which involved mapping test cases to DoD Blue Book Requirements and reviewing/analyzing collected evidence
  - Of the 500 selected requirements, 31 were deemed out of scope, 451 (96.2%) were deemed compliant, 9 were viewed as partially compliant and 9 were rated as non-compliant
  - Items that were partially or non-compliant related to IUID and serial number tracking requirements (and are not expected to be fully compliant until 2014/2015)
- Defect Resolution/Regression a continual process
  - FMO/DFAS will continue to provide validation support throughout the defect resolution (testing) efforts

Navy ERP 1.1 and NAVICP Phased Deployment



Material Group 1
NAVICP 20%

NAVICP Mechanicsburg
SS/L1/DSSP

HM&E – Ships Propulsion
HMI&E – Deck & Auxiliary

NAVICP Philadelphia
SH3/CH53 – Sea King/Sea Stallion
Common Avionics
E2/C2 – Hawkeye/Greyhound

Material Group 2
NAVICP 40%

NAVICP Mechanicsburg
Communications/Surveillance
Air Traffic Control
GPETE/RADIAC
Fire Control
Integrated Self Defense
FMS Support

NAVICP Philadelphia
SH60 – Seahawk
C130 – Hercules
TA4J/T2C – Goshawk/Buckeye
AV8B – Harrier II
F/A18 – Hornet
P3 – Orion
AH1/UH1
FMS Support

Material Group 3
NAVICP 40%

NAVICP Mechanicsburg
Nuclear Propulsion
Strategic Weapons Systems
Carrier Planned Equipment Replacement Program
End Items

NAVICP Philadelphia
EA6 - Prowler
Aviation Support Equipment
V22 - Osprey
CH46 – Sea Knight
Engines
Kits

Program Updates (cont'd)

• Planning Phase	• Analysis Phase	• Readiness & Transition	• Final Prep	• Go-Live Phase

- **NAVSEA**
  - General Fund "Go Live" 1-Oct-10. On track and in the Command Readiness phase of deployment.
    - Cutover Plan and production load schedule on track
    - Primarily Master Data being converted in conjunction with Go Live. Full transactional data conversion will take place at a later date (TBD)
      - Conversion processes being tested during mocks
      - Mock 4 file load success rate > 95%
    - Business Validation plans and Business Transition Planning complete
      - 6 ECPS Identified
  - Working Capital Fund deployment planned 1-Oct-11. On track and in the Planning phase of deployment
    - Business Process workshops complete (working groups scheduled monthly)
    - Full Master and Transaction Data Conversion will be executed in conjunction with Go -Live
      - Mock 1 Conversion in process and on schedule

Financial Extension

- **What is the Financial Extension?**
  - The Financial Extension intends to deploy Navy ERP to 11 additional commands (currently excludes BUMED, MSC, and Marine Corp) adding ~78,000 users resulting in the execution of approximately 100% of the Navy's TOA in Navy ERP and the retirement of 17 legacy systems
  - It will enable business transactions to be executed between commands using standardized processes in a real time environment, with a robust audit trail, resulting in more efficient processing of invoices and payments

- **What is the strategy?**
  - Establish a proper Governance structure to drive the business transformation by leveraging enterprise tools and business understandings.
  - Establish a forum for Financial Extension organizations to address concerns and/or requirements
  - Write the book of standard financial management practices under Navy ERP
  - FMO will provide guidance and ensure compliance with standard templates

- **Way Ahead**
  - Implement an understood environment in shortest possible time
  - Standardize a set of implementation procedures and business processes for the Enterprise using the Navy ERP system
  - Test processes for auditability on an ongoing basis

Navy ERP Enterprise End to End Standard Business Processes

Navy ERP Enterprise Standard E2E Business Process Development (FMO/DCMO) as of June 09

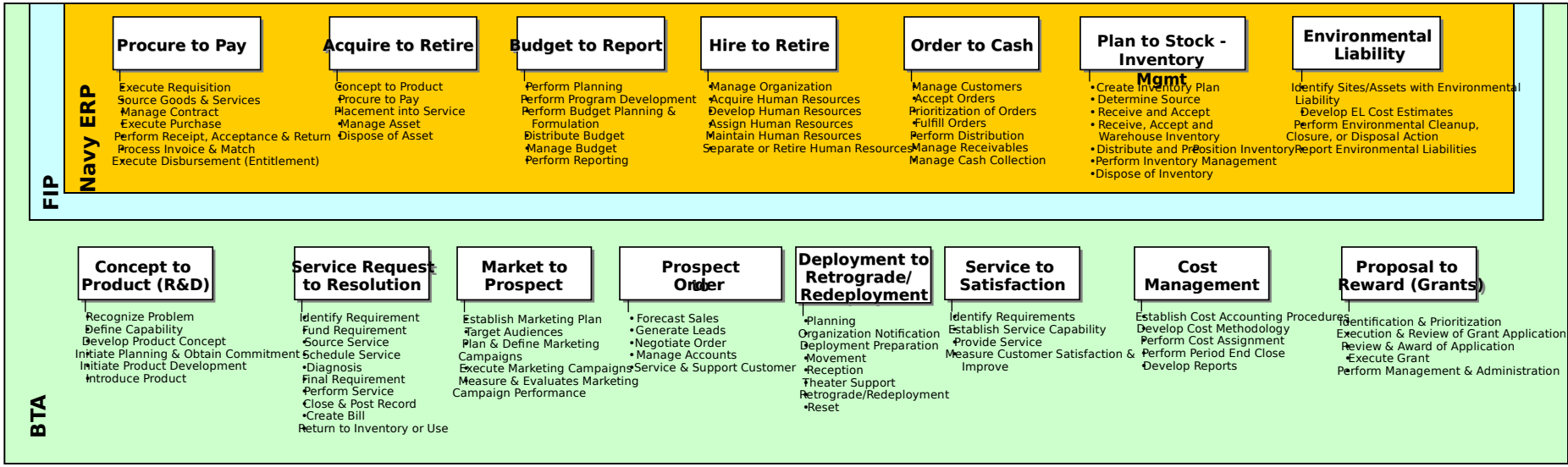
Internal Entitlement Processes

- Electronic Invoice Processing (completed)
- Manual Invoice Processing (completed)
- Purchase Card Process (in process)
- F110 Process
- Create Purchase Request/Purchase Order
- MILSTRIP Process
- Direct Cite Process
- Preponderance of Funds Process
- Reimbursable Funding Process

Incorporate 'Exceptio processes and identify internal controls with existing documentati

Test and validate standard processes are being used

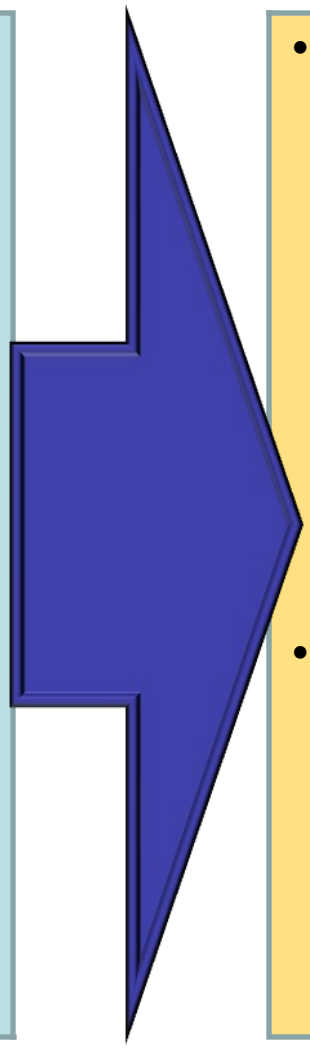
Conduct Continuous Process Improvement efforts for existing documentation



The Financial Management Office, ERP Standards Team works with the Command Business Offices, Navy ERP Program Office, and other interface partners to prepare the end to end business process documentation. A comprehensive list of each High-Level end to end process along with their respective sub-processes are being documented for each of the business process areas (Navy ERP section shown above).

A Change to the Reporting Approach

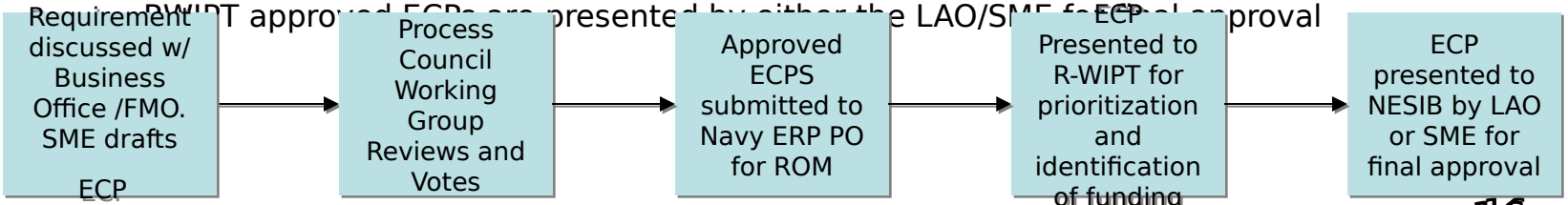
- **Currently - Data Push – SAP and Legacy Reports**
  - Structured reports delivered at specific times
  - There are MANY homegrown shadow reporting systems/databases in the commands that combine reports to get required data
- **ABAP**
- **WARS Extracts**
- **SAP Standard**
- **SAP Business Warehouse**
  - 12,500 users role mapped, ~ 150 log in each week
  - 5 new classes required



- **Future – Data Pull – Business Intelligence and "Flexible Analysis"**
  - The use of near real-time (~24 hours) data sets that can be downloaded,
  - Then filtered, sorted, or formatted for specific use with a variety of Microsoft tools
- **BusinessObjects / Crystal Reports**
  - Data Conversion
  - Contract reconciliation
  - Ad-hoc Reporting
  - Hooks to legacy data sources

ECPs - Overview

- **ECP – Engineering Change Proposal**
  - Required for all system related changes that modify existing or propose new requirements/functionality within Navy ERP (E.g. Adding fields, new interfaces/reports, process changes relating to new FMR's etc)
  - All ECPs pass through a tiered level review/approval process commencing with the Process Council Working Group and ending with the NESIB (Navy Enterprise Senior Integration Board)
- **The Process Council Working Groups**
  - Functionally based groups (Financial, Acquisition, Program Mgt, Supply Chain, Workforce Mgt) chaired by a Lead Action Officer (LAO) created to provide oversight of business process re-engineering conducted under the Navy ERP program and approval of the resultant new business processes.
  - They are expected to conduct routine reviews, oversights, decisions, and interactions in regards to adjusting Navy "requirements" to fit within the existing methods by Navy ERP.
- **ECPS approved by the Working Groups are**
  - Submitted by LAO to Navy ERP Program Office for a ROM (Range of Magnitude) and
  - Presented at the monthly RWIPT meeting for review/approval
- **RWIPT – Requirements Working Integrated Process Team**
  - Comprised of SYSCOM Business Office Leads, LAOs, Navy ERP Business Release Manager
  - Prioritize and identify funding options for Navy ERP ECPs to be recommended to the NESIB and the ASN RD&A for approval
- **NESIB – Navy Enterprise Senior Integration Board**
  - Comprised of Senior Executives that meet monthly to review the Navy ERP program health
  - RWIPT approved ECPs are presented by either the LAO/SME for final approval


Requirement discussed w/ Business Office /FMO. SME drafts ECP
Process Council Working Group Reviews and Votes
Approved ECPS submitted to Navy ERP PO for ROM
ECP Presented to R-WIPT for prioritization and identification of funding
ECP presented to NESIB by LAO or SME for final approval

Lessons Learned from SAP Defense Customers – Common Challenges Implementing ERP[1]

- Executive Sponsorship and Governance - Alignment and Continuity of Leadership
- Data Management – “The Right Data” - Proper Cleansing and Migration Strategy & Execution
- Project Scope Definition and Maintenance
- Achieving the Right Balance – Configuration versus Customization
- Engage End Users – An Integrated, Multi-Discipline Approach – All Project Aspects
- Think “End-to-End”
- Strong Expectation Management

[1] Information from SAP Customer Surveys. Used with permission.

Summary

- **Navy ERP is the Cornerstone of our FM framework for DON Business Transformation**
  - Standard business processes
  - System of record for both General Fund and Working Capital Fund financial accounting and funds control
  - USSGL,SFIS, and BEA compliant
  - Enables significant reduction in the number of legacy systems requiring support
  - Enables, but does not guarantee, audit readiness
- **Navy ERP will provide increased efficiency and improved quality of information to support decision making.**
- **FMO is fully committed to support Navy ERP as the target solution for achieving a vision of improved, integrated, and compliant financial management.**
- **We are working with DFAS, BTA, the DCMO, FMB, the Navy ERP Program Office, and Commands to ensure a successful roll out.**

FMO Key Points of Contact

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BACKUP

Benefits of ERP

	Without ERP	Navy ERP
General Ledger	• Different General Ledgers for General and Working Capital Funds and across commands • Budgetary and Proprietary General Ledger accounts not in balance	• Standard General Ledger for General and Working Capital Fund used by all commands • Budgetary and Proprietary General Ledger accounts self balancing
Management Reporting	• Up to 30 days to get financial status • Multiple systems for financial reporting – projects, labor, cost, budgetary and proprietary	• Near Real-time reporting • Single System for financial reporting for all financial status
Annual Close	• Blackout period at the end of the FY required for annual close and start up of new year's business • Manual process for return of available funding for "Unfilled Customer Orders"	• Can begin new year's business on first day of new FY, so no blackout period required • Automated Year End processing for return of available funds for "Unfilled Customer Orders" complying FMR guidance
Vendor Pay	• Vendor Pay transactions entitled in STARS-One Bill Pay system separate from accounting system of record resulting in mismatched data	• "Book of Record" and entitlement system in one integrated system (Navy ERP-entitled) for Vendor Pay – significantly reduces unmatched disbursements
Funds Control	• Multiple systems for funds control and accounting at various echelons • Manual and/or semi-automated "Funds Availability Check"	• Single System for Funds Control and Accounting for all Commands enables more efficient and expedient allocation and execution of funds • System Funds Availability Controls ensure funds authorized are not exceeded, preventing Anti-Deficiency Act violations

Benefits of ERP

	Without ERP	Navy ERP
Total Force	• Commands must access various systems to see all of their personnel • No enterprise system that includes the organizational hierarchy	• Provides comprehensive view of workforce Enables total force (Civilian, and Military and Contractor-support as appropriate) visibility within a single system, and includes the organizational hierarchy
Training Records	• Individual Commands' Training offices would have to prepare their own spreadsheets to send to Office of Civilian Resources (OCHR) to satisfy the OPM requirement	• Automatically sends course completion updates for upload to Defense Civilian Personnel Data System (DCPDS) to fulfill OPM requirements to maintain training records
Awards	• Manual Awards Process takes hundreds of hours yearly preparing SF-52 (Request for Personnel Action)	• Recommendation and approval of awards is documented within Navy ERP, and the process culminates in automated outbound file to OCHR for upload into DCPDS without additional SF52s by regional HROs
Internal Control Labor	• Human intervention required for compliance with FMR Vol. 8, Chapter 2, paragraph 0204, requiring Certification of Time records being transferred to Defense Civilian Payroll System (DCPS)	• System enforces compliance with FMR requirement, only records that are certified are transferred to Defense Civilian Payroll System (DCPS) for payroll processing • Reduces rework by having certification in advance of processing

Benefits of ERP

	Without ERP	Navy ERP
Data Transparency	• Lack of Data Transparency across commands for shared contracts, invoice pre-validation and processing, funds availability/execution and project management	• Single System for shared contracts, invoice pre-validation and processing, and funds availability/execution across all Commands enables validation of funds availability prior to contract obligations, invoice pre-validation, and invoice payment • System ensure funds authorized are not exceeded • Provides visibility for joint project management across organizations
Workflow	• Funding documents are manual routed	• Funding documents are electronically routed
Auditability	• Limited system-enforced internal controls	• System audit trail captures history of changes • System controls enforce fiduciary responsibility
Project Mgt: Financial Controls	• No hard stop on project spending	• Hard controls on labor and materials, and if desired, on projects/portions of project • Managers have near real-time tracking of expenses to prevent overspending
Project Mgt: Financial Reporting	• Project planning, funding, and execution performed in disparate systems/tools • Data entered manually into various tools for comparing plan-vs-actual	• Planning, funding, and execution data available in one system for reporting plan-vs-actual -- no gathering data from various sources, no manually inputting data, and improved data accuracy

Navy ERP Terminology

FORMER TERM	NEW TERM
Allocation	Budget Transfer
Commitment	Purchase Requisition
Obligation	Purchase Order
Outgoing Funding Document	Purchase Requisition/Order
Incoming Funding Document	Sales Order
Appn/BFY/BLI/PE	Fund
Project Unit	Functional Area
RFM	Fund Center/Cost Center
Receiving Activity	Vendor
Sending Activity	Customer
Document Approval Process	Workflow
Labor Rates	Activity Types
General Ledger Expense & Revenue Accounts	Cost Elements (CO)/ Commitment Item (MM)
Individual Task	Work Breakdown Structure (WBS)/Network Activity (NWA)